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Immigration and Crime: An International Perspective

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In the late 1920s, President Herbert Hoover appointed a National Commission on Law Observance and Enforcement to address rising concerns about crime. The Commission dedicated one of its final reports to the issue of "Crime and the Foreign Born," which begins by noting that "[t]he theory that immigration is responsible for crime . . . is almost as old as the colonies planted by Englishmen on the New England coast" (National Commission on Law Observance and Enforcement 1931, p. 23).

Almost a century later, concerns about crime remain one of the most frequently expressed reasons for public opposition to immigration in countries around the world. Figure 1 plots the share of respondents in OECD countries worried that "immigrants increase crime" against the share of respondents worried that "immigrants take jobs away from natives," which is another prominent public opinion concern (for example, Mayda 2006; Haaland and Roth 2020). Most countries lie

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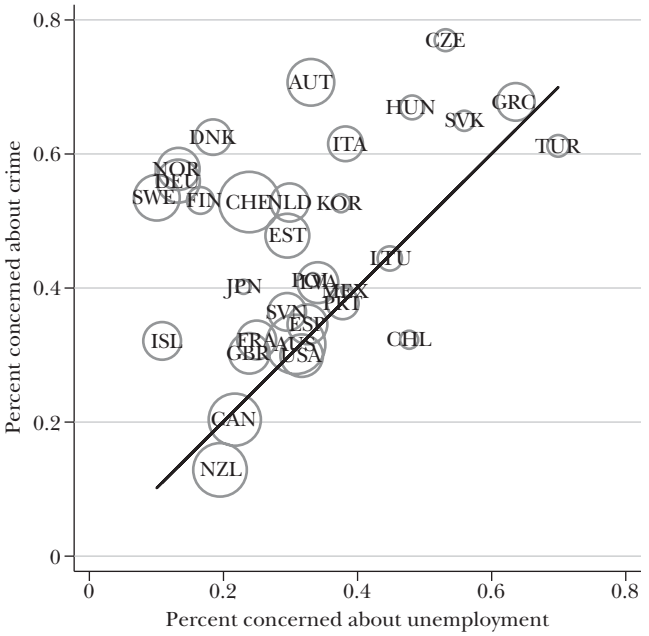
Figure 1
Natives' Concerns in OECD Countries about the Effect of Immigration on Crime and Unemployment



Source: Authors' compilation from the 2017–2020 waves of the World Values Survey and European Values Survey(EVS 2023; Haerpfer et al. 2022).
Notes: Concerns about crime are measured by the share of respondents that agree with the statement "Immigrants increase crime." Concerns about unemployment are measured by the share of respondents that agree with the statement "Immigrants increase unemployment." We included all countries in the European Values Survey and all other OECD countries in the World Values Survey: Australia (AUS), Austria (AUT), Chile (CHL), Czechia (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Great Britain (GBR), Greece (GRC), Hungary (HUN), Iceland (ISL), Italy (ITA), Japan (JPN), Lithuania (LTU), Mexico (MEX), Netherlands (NLD), New Zealand (NZL), Norway (NOR), Poland (POL), Portugal (PRT), Slovakia (SVK), Slovenia (SVN), South Korea (KOR), Spain (ESP), Sweden (SWE), Switzerland (CHE), Türkiye (TUR), United States (USA). The size of the markers is proportional to the share of immigrants over total population. The 45-degree line is also shown in the graph.

well above the 45-degree line, meaning that more people worry about the crime effects of immigration than about its labor market effects. This pattern holds especially for countries with a higher share of migrants over total population, indicated by larger circles.

Evidence on the evolution of beliefs concerning immigrants and crime over time can be documented using survey evidence from the United States. For the past 30 years, Gallup has regularly surveyed a representative sample of Americans, asking

them to consider various topics and "say whether immigrants to the United States are making the situation in the country better or worse, or not having much effect."[1] When the topic is "the crime situation," half or more of the Americans surveyed have answered "worse" in almost every wave. If these views have lately somewhat improved, with 42 percent of respondents choosing "worse" in 2019, this answer was still 18 points higher than the proportion answering that immigrants worsen their job opportunities in the same year.

Perhaps surprisingly, economists have only recently begun to investigate the links between immigration and crime in a systematic way. Advances in methodology and data quality during the past few decades have made it possible to go beyond simple correlations and to assess the causal impact of immigration on crime. This evolution has had much in common with the study of the labor market effects of migration depicted in this journal by Peri (2016).

In this paper, we first describe recent international trends in immigration and crime, exploring why migrants may at first appear much more criminally active in certain countries. We then discuss the theoretical framework and methodological tools that economists have used in thinking about the relationship between immigration and crime. We assess what these approaches have produced in various contexts as to the causal impact of immigration levels on crime rates. We review the evidence on this point so far, which overwhelmingly suggests that immigrants do not increase crime levels in the communities where they settle, and confirm this overall null-effect conclusion using newly collected international data. Finally, we consider the evidence on the links between access to legal work and the crime propensity of different kinds of immigrants, including refugees and those with irregular legal status. The relatively few papers that have probed this issue all conclude that legal status and work permits strongly decrease the probability that immigrants will become involved in crime.

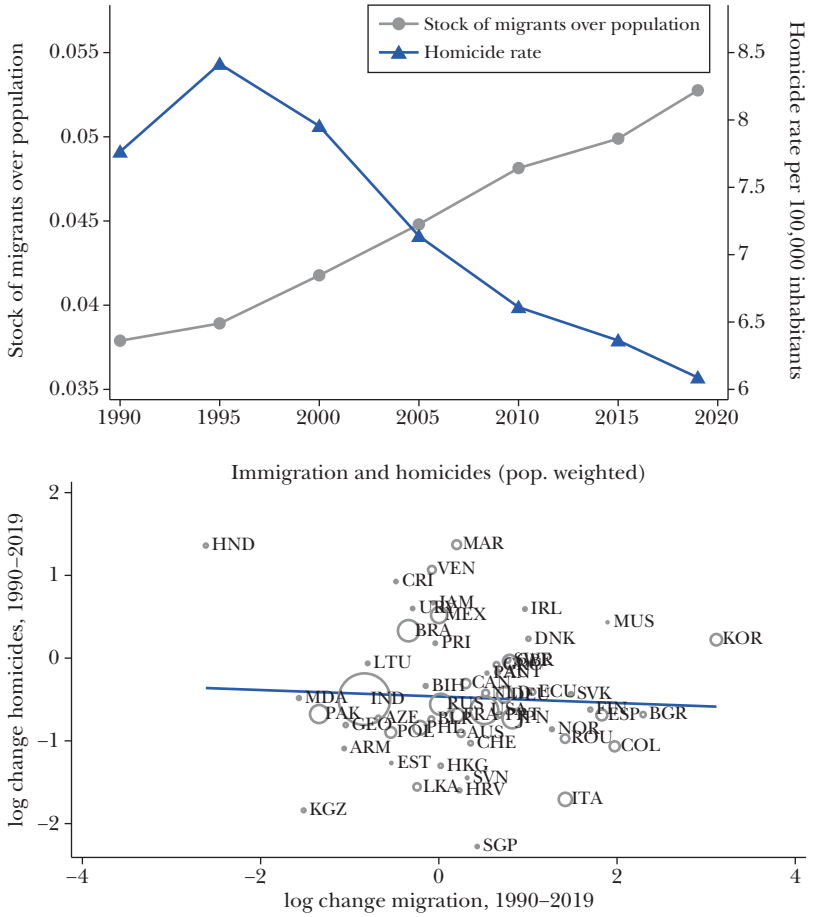
International Patterns of Immigration and Crime

Correlating Immigration and Crime across Countries

The top panel of Figure 2 plots the change in the number of immigrant arrivals and of homicides recorded per population in 55 countries over the period 1990–2019. We focus on homicide data because it is comparable across countries, owing to the limited underreporting (if any) for this type of crime compared to other crime categories, such as property or even other violent crime. This graph clearly shows a negative relationship between immigration and crime over the past

[1] Individuals surveyed by Gallup in 2001, 2002, 2004, 2007, 2017, and 2019, were asked the following question: "For each of the following areas, please say whether immigrants to the United States are making the situation in the country better or worse, or not having much effect." Respondents could answer either better, worse, not much effect, or no opinion. Among the topics to consider were "the crime situation" and about '"job opportunities for you/your family" (https://news.gallup.com/poll/1660/immigration.aspx).

Figure 2
Immigration and Homicides in 55 Countries, 1990–2019



Source: Authors' own compilation from combining the United Nations' Global Migration Data (United Nations 2023a) and Global Study on Homicide (United Nations 2023b).
Notes: The graph in the top panel plots the average homicide rate and the average share of foreigners over total residents across 55 countries: Armenia (ARM), Australia (AUS), Austria (AUT), Azerbaijan (AZE), Bulgaria (BGR), Bosnia and Herzegovina (BIH), Belarus (BLR), Brazil (BRA), Canada (CAN), Switzerland (CHE), Colombia (COL), Costa Rica (CRI), Germany (DEU), Denmark (DNK), Ecuador (ECU), Spain (ESP), Estonia (EST), Finland (FIN), France (FRA), United Kingdom (GBR), Georgia (GEO), Greece (GRC), Hong Kong (HKG), Honduras (HND), Croatia (HRV), India (IND), Ireland (IRL), Italy (ITA), Jamaica (JAM), Japan (JPN), Kyrgyzstan (KGZ), South Korea (KOR), Sri Lanka (LKA), Lithuania (LTU), Morocco (MAR), Moldova (MDA), Mexico (MEX), Mauritius (MUS), Netherlands (NLD), Norway (NOR), Pakistan (PAK), Panama (PAN), Philippines (PHL), Poland (POL), Puerto Rico (PRI), Portugal (PRT), Romania (ROU), Russia (RUS), Singapore (SGP), Slovakia (SVK), Slovenia (SVN), Sweden (SWE), Uruguay (URY), United States of America (USA), and Venezuela (VEN). The top panel covers the period 1990–2019 (in five-year intervals). The bottom panel shows the cross-country relationship between the (log) change of the two variables over the same period.

30 years, as the average homicide rate across countries dropped by one-third—from a peak of 8.5 per 100,000 inhabitants in 1995 to just above 6 in 2019—while the share of foreign residents increased by two thirds.

Of course, these average international trends may mask important differences in the relationship between changes in immigration and crime across countries. For this reason, in the bottom panel of Figure 2 we plot the (log) change in homicide rates between 1990 and 2019 (on the y-axis) against the (log) change in immigration over the same period (on the x-axis) across the 55 countries for which we have these data. The size of the circles indicates the relative population size of each country. The regression line, also shown in the graph, is not significantly different from zero.

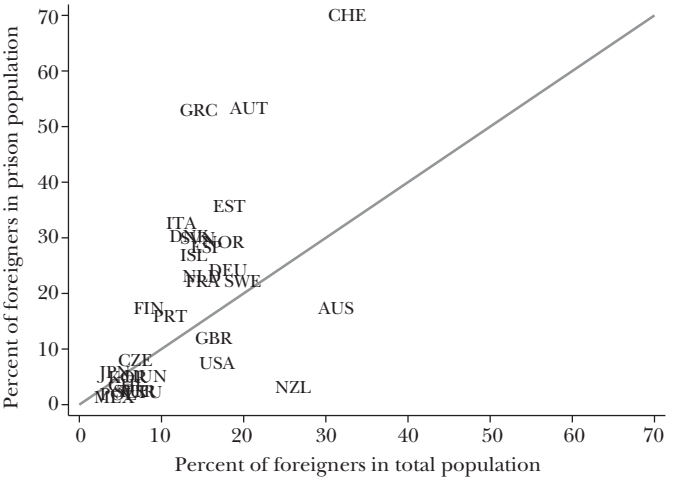
From this exercise, there appears to be no correlation between immigration and crime, at least at the cross-national level. Of course, these correlations should not be taken as causal evidence of an immigration-to-crime relationship, something for which we need to use the methodological tools we explain in detail later; nevertheless, they suggest that broad trends in immigration and crime are not aligned with the high levels of public worry documented earlier. Is this the result of important misperceptions about the level of participation of foreign nationals in criminal activity—something quite common when it comes to numbers linked to immigration and which can be improved with information (Grigorieff, Roth, and Ubfal 2020; Alesina, Miano, and Stantcheva 2022)—or is there other evidence that may tend to support this perceived overrepresentation?

The Overrepresentation of Migrants in Crime

Comparing the prevalence of crime across native-born and migrant populations across countries is not easy, but one possible approach uses prison population numbers. One reason why people might believe that immigrants worsen the crime situation may stem from the fact that, in most developed countries, the share of foreign-born prisoners surpasses—often by a large extent—the share of foreign-born residents. Notable exceptions in this respect are the United States and a few other Anglo-Saxon countries: Abramitzky et al. (2023) provide evidence of the underrepresentation of immigrants in US prisons over several decades.

The frequent overrepresentation of incarcerated immigrants relative to overall population, depicted in Figure 3, might be due to two measurement issues quite specific to immigration-crime statistics. One is that irregular aliens (that is, those not officially registered by the appropriate process in that nation) would be counted in the share of immigrants in the prison population, but not in the share of immigrants in the resident population. The other is the potential harsher treatment of foreigners by the police and the judiciary system due to discrimination or unequal access to legal services and noncustodial measures, such as bail or home-detention. Still, these factors cannot plausibly account for the high incarceration rate of immigrants, which is 2 times higher than that of natives on average across these countries, up to 3 times higher in Austria and Denmark, and 4.5 times higher in Greece.

Figure 3
Overrepresentation of Foreigners in Prison Populations



Source: Authors' own compilation combining date on the proportion of foreign prisoners from ICPR (2023) and data on proportion of foreign residents in the same country in the same year from the OECD (2023).
Notes: The countries listed are Australia (AUS), Austria (AUT), Chile (CHL), Czechia (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Great Britain (GBR), Greece (GRC), Hungary (HUN), Iceland (ISL), Italy (ITA), Japan (JPN), Lithuania (LTU), Mexico (MEX), Netherlands (NLD), New Zealand (NZL), Norway (NOR), Poland (POL), Portugal (PRT), Slovakia (SVK), Slovenia (SVN), South Korea (KOR), Spain (ESP), Sweden (SWE), Switzerland (CHE), Türkiye (TUR), and the United States (USA). The data refer to the latest year available, ranging between 2014 and 2020. The 45-degree line is also shown in the graph.

A more general reason as to why immigrants appear to disproportionately contribute to prison populations in most countries may come from important differences in the composition of the foreign and native populations in terms of basic characteristics such as gender, age, and education. Foreigners are overrepresented in the young male population of most countries, and we know that men are much more criminally active than women and that offending behavior has long been observed to peak during an individual's late teens and early 20s (for example, Quetelet 2003; Hirschi and Gottfredson 1983). Moreover, in many destination countries, immigrants are on average less-educated than natives. The OECD classifies foreign-born and native-born in each country as either having low or high education levels in its 2018 Indicators of Immigrant Integration report (OECD 2018). In the EU28 group of countries, 22.5 percent of natives are classified as low-educated, compared to 33.9 percent of foreign-born; in the United States, only 7.5 percent of natives are low-educated, compared to 23.5 percent of foreign-born. Because there is now very strong causal evidence of a positive effect of education in preventing criminal participation (Lochner and Moretti 2004; Machin, Marie, and Vujić 2011), this is another factor that may contribute to the overrepresentation

of immigrants among offenders. The impact this education gap has on immigrant criminal propensity may be context-specific and depend on the importance of "skill downgrading," which immigrants limits to jobs below their skill level because of language or legal barriers (for a review in this journal, see Dustmann, Schönberg, and Stuhler 2016), for the earnings potential of immigrants in different countries.

While comparing crime rates among immigrants and natives—either conditional on other individual characteristics or not—is informative, it may not be the most relevant comparison from a policy perspective. It is probably more pertinent to ask whether higher migration causes an increase in crime rates, which is what citizens, voters, and decision-makers in destination countries care about. Of course, immigrants' involvement in crime and the impact of immigration on aggregate crime rates are intimately related. To the extent that immigrants display a higher probability than natives of committing crimes, one may expect that higher immigration inflows would lead to increases in measurable criminal activity in destination countries. In practice, this does not need to be the case if, for example, the share of migrants in the population is too small to influence crime rates or if they directly substitute for and displace natives' criminal activity. Evaluating the relationship between immigration and crime is thus more complex than the simple interpretation of correlation and raw statistics, requiring some theoretical framing as well as state-of-the-art econometric tools.

Theoretical Framework and Empirical Challenges

The workhorse Becker (1968) model of criminal participation decision-making—based on an individual cost-benefit analysis of whether to commit crimes—delivers some straightforward predictions regarding immigrants' involvement in crime relative to the native-born population. First, crime propensity is expected to be higher among immigrants relative to the local population if immigrants are relatively negatively selected in terms of certain characteristics linked to legal labor market earnings potential, such as education and skill level. Second, immigrants are more likely to commit crimes if they face worse wage or employment prospects than their demographic characteristics would predict, due to labor market discrimination, skill downgrading, or illegal status.

These factors suggest that if immigrants arriving in an area are disproportionally young, unskilled males facing some form of labor market barrier to entry, then one could reasonably expect that crime rates would increase. But although this belief is probably one reason behind the strong link in public opinion between immigration and crime, it is too simplistic for two main reasons. First, the potential costs associated with criminal activity for foreign residents may be higher than for natives—higher arrest probability, harsher sentences, and the risk of deportation—leading fewer immigrants to choose to participate. Second, as we move from the individual crime choice to local crime rates, the latter may depend on general equilibrium effects linked to congestion effects in labor markets and welfare (for

example, how migrant inflows complement some native-born workers but substitute for others), interactions in crime, social multipliers, and so on. Given these issues, theoretical conclusions about the relationship between immigration and crime have an ambiguous sign, and the relationship is ultimately an empirical issue.

However, a combination of selection and measurement issues make it difficult to estimate a causal effect of immigration on local crime rates. The selection problem is common to research into economic impacts of migration that must account for foreign arrivals moving disproportionally into booming (for jobs) or depressed (for housing) locations. For example, if migrants choose economically expanding areas with comparatively low crime rates, then a simple ordinary least squares correlation across localities at a point in time will tend to overstate how immigration is related to job growth and understate how it is related to crime. A more sophisticated approach might look at data about immigration and localities over time, including control variables for local economic activity as well as area and time fixed effects. While a more careful approach along these lines should greatly reduce the potential bias, compared to a basic ordinary least squares approach, it would still not necessarily yield causal estimates, for two main reasons. First, unobservable time-varying, area-specific factors that affect both immigration and crime may remain, such as changes in local policies (for example, measures that are simultaneously anti-migration and pro-police) or housing prices. Second, area crime dynamics may themselves influence migrant location choice, creating other reverse causality issues.

To address these issues, economists have often used the shift-share instrumental variable approach. This approach rose to prominence after it was used by Bartik (1991) to investigate the effects of local economic growth policies and was adapted by Altonji and Card (1991) in the migration context. A decade later, it was further developed as a formal tool to investigate the causal labor market impact of immigration by Card (2001) and has since become the norm in this literature. This strategy is based on an assumption that the location decision of new migrants with a specific nationality (that is, *shifts* in number of new arrivals) is causally affected by the historical location of previously-arrived migrants from the same nationality across areas (that is, the *share* of immigrants from a given nationality in each country, region, district, and so on). If this assumption holds true, it can be used as the first stage in a two-stage least squares approach. In the first stage, the historical share of immigration across localities is used to predict current immigration. In the second, the predicted (and thus arguably exogenous) values of immigration in a given area from the first-stage regression are used to predict crime in that area.

The validity of the shift-share instrumental variable strategy relies on initial migrant distribution from specific countries not being correlated with persistent area-specific factors that affect local crime rates. This crucial "exclusion restriction" is not directly testable but can be made more convincing by looking at the location of the previously-arrived stock of immigrants several years before the period of analysis, and, preferably, prior to a relatively important increase in migrant flows. A simple validity exercise is to check for (no) correlation between initial shares of immigrants from a certain area in a given origin country and changes in area-specific factors

that can influence crime, or crime rates themselves, in the pre-analysis period. Additional robustness checks have recently been proposed that can further reinforce the validity of the shift-share instrumental approach for calculating causal estimates of complex and sometimes elusive relationships, including that between immigration and crime (Jaeger, Ruist, and Stuhler 2018; Adão, Kolesár, and Morales 2019; Goldsmith-Pinkham, Sorkin, and Swift 2020; Borusyak, Hull, and Jaravel 2022).

The measurement problem is more pronounced in the study of the migration–crime relationship than in most other dimensions of the economics of migration. The problem is that the official numbers on *both* migration and crime may be an unreliable reflection of reality, and simultaneously stem from policy decisions that affect both measures. Countries, states, or municipalities with relatively stronger institutions may consistently produce more reliable crime and migration metrics. The extent of local policy focus on law and order may affect both variables simultaneously. Such problems can mostly be addressed empirically or by using secondary data. For example, if the downward (or upward) bias in crime or migration statistics is relatively *constant*—say only half of crimes are reported, and half the migrants are legally registered—then comparing numbers over time should still reflect real changes. Also, events in which undocumented migrants are given amnesty can be used to check official numbers against the actual migrant population and, in particular, to confirm their geographical distribution. Rates at which crimes are "cleared" with an arrest referral to court, a standard measure of police productivity, can be used as a proxy for changes in an area's law and order focus (as suggested by Ehrlich 1996). Most studies that have convincingly investigated the empirical relationship between immigration and crime have attempted to address these measurement issues.

Empirical Estimates of How Immigration Affects Crime Rates

Current National-Level Evidence

One of the first studies to estimate the causal effect of immigration on crime, conducted by Butcher and Piehl (1998), used US data across 43 metropolitan areas during the period 1979–1990. They first show, using a standard ordinary least squares regression, that immigration is positively correlated with local crime rates. However, when they use the share of foreign-born in 1979 as an instrument for the inflows during the period 1980–1990, the estimated causal effect on the local crime rate is not significantly different from zero.[2] Spenkuch (2014) obtains similar results using US county-level data for the period 1980–2000. Both ordinary least squares and shift-share instrumental variable estimates of the crime elasticity are very small in magnitude (0.11 and 0.01 for property and violent crimes, respectively) and the causal shift-share estimates are not statistically distinguishable from zero.

[2]Butcher and Piehl (1998) only exploit variation from the "share" component of the "shift-share" instrumental variable, following Altonji and Card (1991).

These results for the United States are confirmed by studies using the same empirical strategy to estimate the impact of immigration on crime in other countries. Looking across Italian provinces for the period 1990–2003, Bianchi, Buonanno, and Pinotti (2012) show that immigration is positively correlated with property and violent crimes, but the causal effect is not significantly different from zero. To counter potential measurement issues, they account for the presence of undocumented immigrants by exploiting data on the numerous amnesties of irregular immigrants implemented during this period in Italy, though they cannot disentangle the impact of regular and irregular migration due to the extremely high correlation between the two across provinces. At the same time, regular and irregular migrants have very different opportunities in the labor market, which in turn would affect their opportunity cost of committing crime.

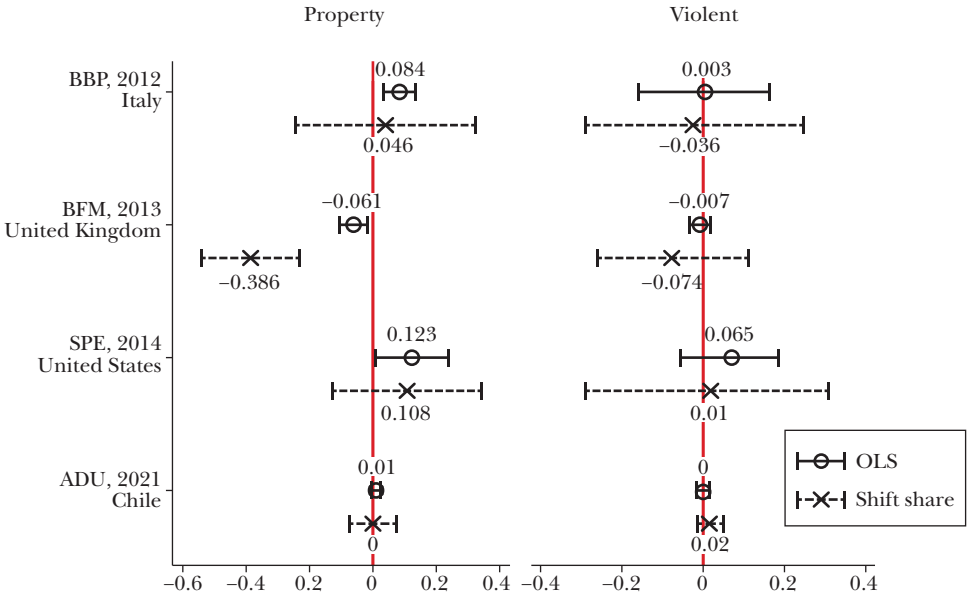
Immigrants are a heterogenous group: one key difference is between economic migrants and asylum-seekers. Looking at UK data, Bell, Fasani, and Machin (2013) estimate the impact of two different groups of immigrants: citizens of eight Eastern European countries admitted to the European Union in 2004 and asylum seekers. Migrants within the European Union had rights to live and work in the United Kingdom, which should lower the propensity to engage in criminal activities. Consistent with this hypothesis, their impact on the overall crime rate—estimated using a shift-share instrumental variable—is not significantly different from zero, and the estimated impact on property crimes is actually negative. For asylum-seekers, who experienced worse earning opportunities and were in many cases denied permanent residence status, Bell, Fasani, and Machin estimate the crime effect by exploiting the quasi-random dispersal policy implemented by the UK government. We discuss these results in the next main section with other papers that also use quasi-random allocation of migrants for causal identification.

Overall, the evidence from shift-share instrumental variable estimates in the United States and in European countries suggests no significant effect of immigration on property or violent crimes. Ajzenman, Dominguez, and Undurraga (2023) confirm this result in another context—immigration to Chile—using victimization rates, instead of police-recorded offenses, as their measure of crime.

Figure 4 summarizes the available estimates of the elasticity of immigration from the papers discussed in this section that provide both ordinary least squares and shift-share instrumental variable estimates of how immigration affects both property and violent crimes. The figure shows coefficients and the 95 percent confidence interval, with the vertical red line indicating no effect. In all contexts, the causal estimates produced by the shift-share methods are not significantly different from zero (and negative in one case). Importantly, the figure also shows that the instrumental variable estimates are invariably more negative than ordinary least squares estimates—rather than just being less precisely estimated.

Overall, there seem to be no discernable causal effect of increased migration inflows in an area on the number of property or violent offences it experiences. Next, we look at a new level of geographical analysis: international evidence across European countries and regions.

Figure 4
Summary of Estimates of the Impact of Immigration on Crime

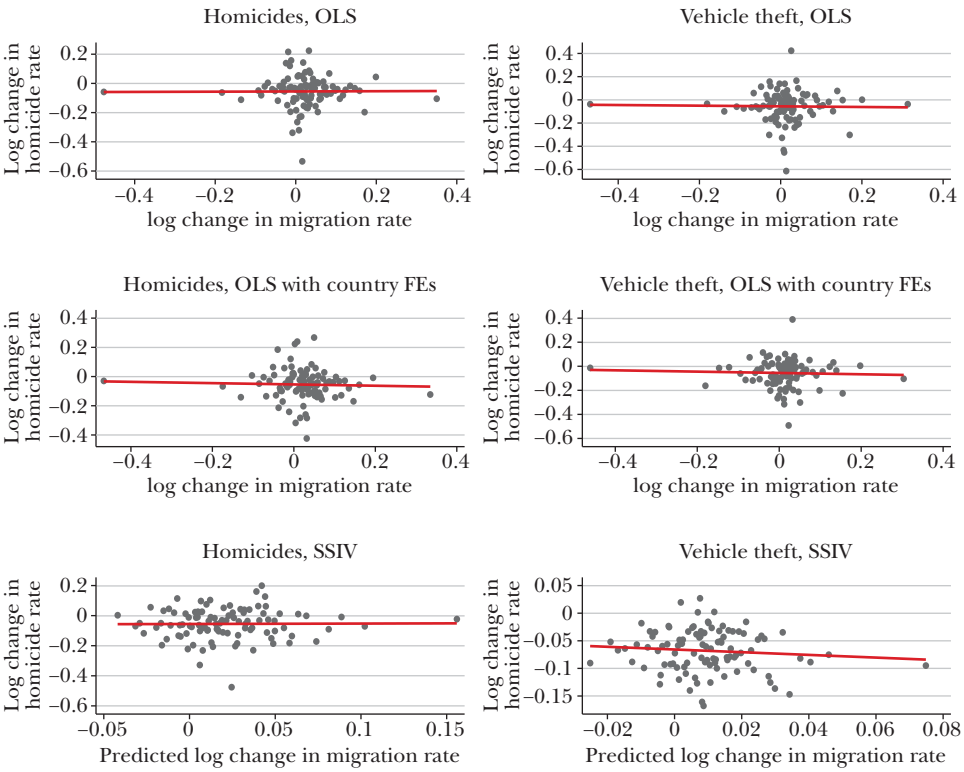


Source: The full references of the papers from which these estimates are taken from are: BBP 2012: Bianchi, Buonanno, and Pinotti (2012); BFM 2013: Bell, Fasani, and Machin (2013); SPE 2014: Spenkuch (2014); ADU 2021: Ajzenman, Dominguez, and Undurraga (2023).
Notes: The two panels of this figure summarize the elasticity response of property and crime rates with respect to a 1 percent increase in the share of immigrants obtained in papers that use a shift share approach to obtain causal estimates in various contexts. The full lines with the hollow circle represent the ordinary least squares estimates with 95 percent confidence intervals, and the dotted lines with a cross the causal shift-share estimates with their 95 percent confidence intervals.

New International Evidence

In the research reviewed so far, each study focuses on a single country. This approach has some clear advantages, but it could hide patterns emerging across countries. For this reason, we complement these previous findings with novel evidence from comparable data across European countries and regions. Specifically, we assembled data on migration and crime for a yearly panel of 216 regions (level 2 of the Nomenclature of Territorial Units for Statistics, or NUTS) from 23 European countries over the period 2002–2017, which are publicly available from Eurostat and OECD. These regions divide EU countries into geographical areas with populations typically between 800,000 and 3 million. Figure 5 plots the relationship, across regions, between the log changes in the share of foreign residents over the sample period 2002–2017, on the horizontal axis, and the log changes in homicide rates (left panels) and motor vehicle thefts (right panels) over the same period. We focus

Figure 5
Immigration and Crime across European Regions


Homicides, OLS
Vehicle theft, OLS
Homicides, OLS with country FEs
Vehicle theft, OLS with country FEs
Homicides, SSIV
Vehicle theft, SSIV
Log change in homicide rate
log change in migration rate
Predicted log change in migration rate

Source: The homicides and vehicle theft data are from Eurostat (2023), the migration and population numbers from the OECD (2023), and initial migrant shares to build the SSIV from Alesina et al (2021).
Note: The figure plots the log changes in homicide rates (left panel graphs) and motor vehicle thefts (right panel graphs) during the period 2002–2017 against log changes (top two panels) or predicted log changes (bottom panel) in the rate of immigrants over total population during the same period across European regions. The graphs present binned scatters of the mean relationship between the two variable (100 equal bins) and associated fitted regression line for three separate specifications. The top panel is from an ordinary least square (OLS) regression with year fixed effects and the middle panel from an OLS regression that adds country fixed effects (FEs). The bottom panel results from the shift-share instrumental variable (SSIV) approach that regresses the predicted log change in migration (resulting from the first stage regression) on the log change in the crime rate per crime type. The SSIV regressions include year and country fixed effects. All specifications, OLS and SSIV, are weighted for baseline population size in 2002 and control for log changes in GDP per capita and population. The original data cover 216 European regions at level-2 of the Nomenclature of Territorial Units for Statistics (NUTS2) in 23 countries. We use data for the 73 (85) regions in 11 (10) countries for which the homicide (vehicle theft) numbers are consistently reported over this period.

the analysis on these two types of crime because they are consistently defined across countries and more accurately measured than other types of crimes.

The top two panels show the ordinary least squares (OLS) correlations. The univariate regression of (log changes in) homicide and property crime rates on

immigration is flat (top graphs). Absorbing national-level shocks through the inclusion of country fixed effects, as we do in the middle graphs of Figure 5, enables us to focus on variation across regions within the same country. The relationship between immigration and crime now becomes somewhat negative, though it is far from being statistically significant.

The bottom two panels show the results of a shift-share instrumental variable (SSIV) approach. In these panels, the change in the immigration rate on the horizontal axis represents the *predicted* migration in a region between 2002 and 2017, based on migrant shares in these regions in 2000, and national shifts in migration (in- and outflows) at the national level. The estimates are noisier using this causal approach, but there is still no indication that increases in immigration are systematically associated with increases in crime.[3]

Crime and the Access of Migrants to Legitimate Income Opportunities

The evidence presented in the previous section focuses on immigrants as a single group. However, this approach may conceal significant variation across groups, as foreign migrants represent a very heterogeneous population. In particular, the access that migrants have to legitimate income opportunities may vary for, say, legal economic migrants, legal asylum-seekers, and undocumented migrants. Such differences may be particularly relevant for the purpose of our analysis, as the opportunities for earning legitimate income will affect the opportunity cost of committing crimes.

We mentioned earlier the study of two types of migrants to the United Kingdom by Bell, Fasani, and Machin (2013): citizens of the eight Eastern European countries admitted to the European Union in 2004, and asylum-seekers. Areas in the United Kingdom where the asylum-seekers were quasi-randomly allocated, because of the country's dispersal policy, experienced significantly more property crimes, with a 1 percent increase in refugees among the local population leading to a 1.1 percent increase in police-recorded property crimes. On the other hand, there was no crime increase from the influx of immigrants from new EU member countries. These results are consistent with the fact that new EU citizens had full access to legitimate income opportunities in official labor market—and, thus, a higher opportunity cost of committing crimes—while asylum seekers could not work in the host country.[4] Indeed, asylum-seekers often face significant barriers to employment in the host

[3]The regression results that correspond to the six panels of Figure 5 can be found in Table A1 of the online Appendix. Data and coding for replicating the figure are available as supplementary material on the JEP website.

[4]The results of Bell, Fasani, and Machin (2013) are consistent with those of Piopiunik and Ruhose (2017), who study the impact of ethnic Germans returning to Germany after the collapse of the Soviet Union. They do not detect any effect on property crime for this group, who arrived in the host country with all same rights as native citizens.

countries, which have been shown to have important negative effects on their long-term labor market prospects (Fasani, Frattini, and Minale 2021). Access to and levels of social transfer available may also matter as, for example, Andersen, Dustmann, and Landersø (2019) found that refugee benefit cuts in Denmark increased refugees' involvement in crime.

More recently, some papers have focused on the crucial role of legal status as a determinant of migrants' criminal participation behavior in host countries. To estimate the causal effect of legal status, one would ideally allocate it at random and then compare the probability of committing crime between legalized and nonlegalized immigrants. Although this experimental design is infeasible, many policies approximate this ideal experiment. One example is the accession of Romania and Bulgaria to the European Union on January 1, 2007. As a consequence, all citizens of these countries obtained legal status—including access to the labor market—in all other EU member states. Mastrobuoni and Pinotti (2015) compare the recidivism of Romanian and Bulgarian prison inmates pardoned in Italy with a Collective Clemency Bill on August 2006 (that is, five months before the EU enlargement) with the recidivism of pardoned inmates from countries still awaiting membership to the European Union, before and after the enlargement. They conclude that legal status matters, with recidivism of Romanians and Bulgarians living in Italy declining by over 50 percent relative to the recidivism of other pardoned inmates after the enlargement.

A different policy experiment in Italy involves the online procedure used to award work permits. Prospective employers of immigrant workers must send an electronic application on given "Click Days," starting at 8 AM, and such applications are processed on a first come–first served basis until available quotas of permits are exhausted. Exploiting discontinuities in "click time" to compare those just eligible for work permits to those not eligible, Pinotti (2017) finds that those eligible to work are significantly less likely to be arrested during the following year. The size of the effect is very large and remarkably similar, in relative terms, to that estimated by Mastrobuoni and Pinotti (2015)—a drop of more than 50 percent relative to the baseline crime rate—in spite of the fact that the two papers focus on very different populations; that is, former prison inmates and applicants for work permits. (Of course, the crime rate at the baseline differs widely between the two groups, being about ten times larger for former prison inmates than for applicants for a work permit.)

Other papers that rely on aggregate data confirm the conclusion that legal status to work has a strong effect on crime. In studying amnesties for undocumented immigrants across Italian regions, Fasani (2018) shows that they decrease crime rates, although the effect reported is much smaller than those estimated by Mastrobuoni and Pinotti (2015) and Pinotti (2017) using individual-level data. Outside Italy, Baker (2015) finds that the US Immigration Reform and Control Act (IRCA) of 1986—a generalized amnesty for irregular immigrants—caused a large decline in property crime in the counties relatively most affected by this policy. Relatedly, the end of the amnesty period after the passage of the 1986 legislation

coincided with a very large uptick in the number of arrests for economically motivated crimes (Freedman, Owens, and Bohn 2018).

Overall, this body of evidence confirms the prediction that acquiring legal status decreases immigrants' propensity to commit crime. Additional evidence suggests that the effect is driven by access to better economic opportunities in official labor markets. For instance, Mastrobuoni and Pinotti (2015) show that the decline in crime is driven by immigrants acquiring legal status in northern Italian regions, which experienced access to a dynamic labor market, while the effect is not significantly different from zero in southern Italian regions characterized by a much larger informal economy (and thus where legal status should not matter as much).

These findings also suggest some policy trade-offs. In the absence of perfect enforcement, low migration quotas and other types of legal movement restrictions may contribute to the formation of pools of irregular immigrants with limited access to legitimate earning opportunities, which in turn increases their propensity to engage in crime. In this static setting, generalized amnesties for irregular immigrants and other policies improving their labor market integration and earning opportunities may reduce their involvement into crime. In a dynamic setting, however, generalized amnesties of irregular immigrants may generate expectations of future legalizations, thus increasing migration pressures and arrival of undocumented migrants into the country.

Conclusion

The 1931 Hoover Commission mentioned in the introduction, in its chapter on "Crime and the Foreign Born," states: "In proportion to their respective numbers the foreign-born commit considerably fewer crimes than the native-born" (National Commission on Law Observance and Enforcement 1931, p. 4). This conclusion was based on very simple statistical assessments. It has taken a surprisingly long time—especially when compared to the vast literature on the labor market effects of migration—for a systematic empirical analysis of the causal impact of immigration on crime to emerge in the economic literature.

The emerging evidence seems potentially inconsistent. On one side, in most countries—with the notable exception of the United States—immigrants exhibit a disproportionate involvement in criminal activity compared to natives, as measured by the relative incarceration rate of the two groups. In addition, certain kinds of immigrants, including young and less-educated men and those with irregular legal status, display a much higher propensity to commit crimes than those with documented status. These factors would seem to suggest a positive link between immigration and crime. On the other side, studies designed to measure the effect of immigration inflow effects on local crime rates do *not*, in general, find any detectable causal effect of immigration on local crime rates. For example, all previous studies relying on the shift-share instrumental variable approach estimate crime

elasticities close to zero in various countries, and we further confirm this result on new data across European countries and regions.

We can suggest several possible resolutions for this seemingly conflicting evidence. First, perhaps the observed high arrest and incarceration rates of immigrants stem from discrimination (preference-based or statistical) against immigrants on the part of police or judicial authorities, rather than actual higher crime rates, although we are not aware of any systematic review on this issue internationally. Second, perhaps immigrants have substituted for natives in some illegal criminal markets, which would be consistent with immigrants exhibiting higher offending rates than natives while, at the same time, immigration not leading to higher crime rates at the local level. Finally, the last (and perhaps simplest) explanation remains that the share of immigrants in the population—and among offenders—may still be in most cases too low to cause overall detectable changes in local crime rates. The share of immigrants in the global population is only 3.5 percent, and even in high-immigration countries in Europe and North America, it remains in most cases between 10 and 15 percent. These hypotheses are tentative, and further research is needed to reconcile the patterns emerging from individual-level and aggregate data on immigration and crime patterns.

Some recent work has sought to examine the persistence of the widespread perception that immigration worsens crime problems, in the face of the evidence of null or small effects of immigration on crime. A possible answer involves the role of (possibly biased) media in debates on immigration and crime. For example, Couttenier et al. (2023) study the lead-up to the passage of 2009 Swiss public referendum that banned construction of new minarets on mosques. The author used detailed data on actual crime along with information on newspaper coverage. They show a large upward distortion in media reporting of immigrant crime during the lead-up to the referendum. They estimate that the ban would have passed even in the absence of the heightened reporting, but the vote in favor would have been several percentage points lower. In Chile, where the stock of foreign-born residents with legally approved visas more than tripled from 2010 to 2017, Ajzenman, Dominguez, and Undurraga (2023) consider the effects on crime and on public perceptions of crime. As noticed earlier, using both a shift-share instrumental variable approach and an approach with two-way fixed effects at the municipality and year level, they find no causal effect of immigration on crime. However, they do find a large rise in public concerns about immigration and crime. In turn, these public concern within a given municipality seem linked to whether the inflow of immigrants in that area were less educated or with a non-European ethnicity. In addition, fears about immigrants and crime rose more sharply in municipalities with a larger number of local radio stations per capita, suggesting the possibility that competing media outlets were amplifying public fears.

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